Oil Field Environmental Incident Summary

Incident: 20140209050507 **Date/Time of Notice:** 02/08/2014 16:45

Responsible Party: RIM Operatiing, Inc

Well Operator: RIM OPERATING, INC.

Well Name: CHURCH 1-2X

Field Name: NAMELESS **Well File #:** 13556

Date Incident: **2/8/2014** **Time Incident:** 13:00 **Facility ID Number:**

County: MCKENZIE **Twp:** 150 **Rng:** 102 **Sec:** 2 **Qtr:**

Location Description: The leak started on the well site inside the production tank containment berm. However, some of the brine water leaked underneath the containment berm and off the north side of the location. The brine that ran off the location went down a hill into a creek and followed the creek channel approximately 1000ft.

Submitted By: Troy Johnson **Received By:**

Contact Person: Troy Johnson
5 INVERNESS DRIVE EAST
ENGLEWOOD, CO 80112

General Land Use: Well/Facility Site **Affected Medium:** Soil and Water

Distance Nearest Occupied Building:

Distance Nearest Water Well:

Type of Incident: Valve/Piping Connection Leak

Release Contained in Dike: No **Reported to NRC:** No

	Spilled	Units	Recovered	Units	Followup	Units
Oil	0	barrels	0	barrels		
Brine	**250**	**barrels**	**95**	**barrels**		
Other	0	barrels	0	barrels		

Description of Other Released Contaminant:

Inspected: **Written Report Received:** **Clean Up Concluded:**

Risk Evaluation:
Not Applicable

Areal Extent:
The brine followed a creek channel for approximately 1000ft.

Potential Environmental Impacts:

Due to very low ambient temperatures, the brine is largely frozen or turning to slush, is no longer moving down stream and is on top of frozen ground. Therefore, the spill area should not increase or penetrate the soil much below the surface.

Action Taken or Planned:

Immediately after discovery of the leak, the flowlines that ship brine water to or from this location were isolated. The small holes that had developed under the containment berm were plugged with mud to contain the leak. A vac truck was called and dispatched to the location. Once on location, the vac truck started sucking up the spilled brine from inside the containment berms. RIM Management and the ND Oil and Gas District Supervisor John Axtman were notified. Mr. Axtman immediately came out to the location and assisted me with assessing the spill and offered direction on the preliminary clean up procedures. After recovering the brine from within the containment berm area, the cleanup operation was stopped for the night. A vac truck will be back out to start recovering free brine water in the creek bottom Sunday morning 2/9/14. I called the landowner contact number, but received a voicemail box. I left a message detailing the event and asked for a call back so I could further explain the event and obtain permission to move cleanup crews and equipment onto their property. We will begin excavation and disposal of the spilled brine, contaminated soil, vegetation and ice as soon as possible.

Wastes Disposal Location: Yet to be determined.

Agencies Involved:

Updates

Date: 2/10/2014 ***Status:*** Inspection ***Author:*** Martin, Russell

Updated Oil Volume:

Updated Salt Water Volume:

Updated Other Volume:

Updated Other Contaminant

Notes:

2/10/2014 at 15:00, on location with NDDoH inspector Scott Stockdill. Met with NDIC and RIM personnel. Release escaped secondary containment in four areas into creek bed. No running water in creek at this time. Release visible along ice travelling downstream to the west and entering culvert on access road bordering wellpad on the northwest side. Release continues to be visible for about 300' further downstream to the west of the road and culvert. Water samples taken from the source. Four ice samples were taken: two where release first enters the creekbed, one where it meets the culvert, and the last sample taken at the estimated downstream end of the release.
According to report contact, there is no revised amount of release or amount recovered. Cleanup is being handled by multiple parties; contaminated snow and ice will be reinjected at a nearby salt water disposal site that RIM operates. The landowner on the north side of the wellpad, where the release first entered the creekbed, has been contacted. The landowner on the west side of the access road (northwest of the wellpad) had been called but not reached at the time. Russell Martin was able to get in contact with this landowner and notify of the incident; landowner has requested further contact to go through their secretary. Have notified RIM of this information and they will contact the secretary.

Date: 2/10/2014 ***Status:*** Reviewed - Follow-up Required ***Author:*** Roberts, Kris

Updated Oil Volume:

Updated Salt Water Volume:

Updated Other Volume:

Updated Other Contaminant

Notes:

2/8/14 - 17:50 - Call from John Axtman, Saturday. He has been on location. The salt water got under the ice in the creek, but creek is not running at this time. Roberts conferred with Axtman, and he passed on to the company that cleanup had to be to <250 mg/L Cl and <2,000 uS/cm specific conductivity. Mr. Axtman told them that they had to get a contractor, such as Strata or Absorbent, involved right away (although it sounds like they are small and wanted to do the cleanup themselves). Immediate followup on 2/10/14 necessary. Scott Stockdill assigned.

Date: 2/12/2014 ***Status:*** Inspection ***Author:*** Martin, Russell

Updated Oil Volume:

Updated Salt Water Volume:

Updated Other Volume:

Updated Other Contaminant

Notes:

2/12/2014 at 13:01, on location. Removal of ice has begun; multiple rolloffs and excavating equipment on site. Some fluids removed by vac truck, but hot water not added to aid cleanup due to possible migration concerns. Dirt berms have been constructed in the creek bed at approximately the halfway point of the release's path in the creek bed and after the estimated endpoint of the release. Rolloffs currently being filled; none have been completety filled and removed yet. The responsible party has contacted the secretary for the landowner of the western portion of the release.

Date: 2/13/2014 ***Status:*** Correspondence ***Author:*** Roberts, Kris

Updated Oil Volume:

Updated Salt Water Volume:

Updated Other Volume:

Updated Other Contaminant

Notes:

Greg Wiche, USGS, called regarding this release into a drainage of Lonesome Creek, which drains into Charbonneau Creek. They have the potential to install a temporary conductivity station to monitor for spring runoff. Possible field inspection on 2/18.

Date: 2/20/2014 ***Status:*** Correspondence ***Author:*** Martin, Russell

Updated Oil Volume:

Updated Salt Water Volume:

Updated Other Volume:

Updated Other Contaminant

Notes:

Phone call with company representative; they will be doing sampling to determine nature of deeper contamination noted during initial excavation to determine source of contamination. Due to landfill requirements that no ice is accepted into the landfill, the company is storing impacted ice and soil within a padded, 30-mm lined pit on the wellpad to let the ice melt. Fluids will then be removed and sent to disposal.

Date: 3/6/2014 ***Status:*** Correspondence ***Author:*** Martin, Russell

Updated Oil Volume:

Updated Salt Water Volume:

Updated Other Volume:

Updated Other Contaminant

Notes:

Phone call with report contact due to concerns about meltwater moving contamination from soil stored down by creek. Contaminated soil was moved to well pad area that has a liner placed on it.

Date: 4/8/2014 ***Status:*** Inspection ***Author:*** Stockdill, Scott

Updated Oil Volume:

Updated Salt Water Volume:

Updated Other Volume:

Updated Other Contaminant

Notes:

Arrived on location at 12:27 4/8/14.

Remediation work currently incomplete. There is a small riffle in the impacted stream that is clearly impacted by crude oil. A sample was taken at this location. Main aspects that need to be completed at this location are cleanup and backfill of excavated areas. Chloride test strips were used to determine if standing water around the road needs to be remove; however, it was determined that the water had only 37 to 42 PPM chloride which is not considered impacted.

More followup necessary to ensure proper cleanup.

Date: 4/21/2014 ***Status:*** Correspondence ***Author:*** Martin, Russell

Updated Oil Volume:

Updated Salt Water Volume:

Updated Other Volume:

Updated Other Contaminant

Notes:

Phone call with report contact concerning oil-impacted area. Contact will have personnel check site and clean up oil staining.

Date: 7/1/2014 ***Status:*** Inspection ***Author:*** O'Gorman, Brian

Updated Oil Volume:

Updated Salt Water Volume:

Updated Other Volume:

Updated Other Contaminant

Notes:

Arrived on location at 16:23. 70 degrees F, mostly cloudy, NW wind 15-25 mph. Observed site and took photos. The vegetation near the creek north of the release appeared to be healthy and showed no indications of being impacted from the February release. The north bank of the well pad in the area of the treater did show impacted soils and vegetation in an area beginning from the well pad moving downgradient. The impacted area was approximately 20 feet wide near the release to approximately 5 feet wide closer to the creek. This impacted area had soil borings along its length at approximately 50 feet, 80 feet and 100 feet downgradient from the release. Chloride test strips were used to test the chloride levels nearest to the impacted vegetation, across the road to the west and upgradient approximately 1/4 mile. Results showed a level of 246 ppm nearest to the release, 211 ppm west of the road and 637 ppm upgradient of the release.
More followup will be needed to identify a timeframe for the removal of impacted soils from the areas that had been tested with the borings and to document impacted soil disposal.

Date: 8/7/2014 ***Status:*** Inspection ***Author:*** Martin, Russell

Updated Oil Volume:

Updated Salt Water Volume:

Updated Other Volume:

Updated Other Contaminant

Notes:

8/7/2014 at 16:41, on location. Second excavation not yet started. No on-site work appears to have occurred since last inspection. Photographed site to record progress.

Date: 8/15/2014 ***Status:*** Correspondence ***Author:*** Martin, Russell

Updated Oil Volume:

Updated Salt Water Volume:

Updated Other Volume:

Updated Other Contaminant

Notes:

Phone call from report contact on update at site. Second excavation is complete, and impacted soil is being stored in lined, bermed area on the wellpad.

Date: 9/17/2014 ***Status:*** Correspondence ***Author:*** Martin, Russell

Updated Oil Volume:

Updated Salt Water Volume:

Updated Other Volume:

Updated Other Contaminant

Notes:

Discussion with report contact at a separate incident site, discussed this site as well. Confirmed that excavations will be capped with a clay layer and filled back in. A soil sample will be taken to record soil chemistry at the bottom of each excavation before the clay layer is placed. Impacted soils will be removed to a landfill in Montana by a permitted waste hauler.

Date: 10/15/2014 ***Status:*** Inspection ***Author:*** Martin, Russell

Updated Oil Volume:

Updated Salt Water Volume:

Updated Other Volume:

Updated Other Contaminant

Notes:

10/15/2014 at 12:42, on location. The two, lined, bermed areas on wellpad are currently still in use. Piles of dirt are visible inside them. Large pile of dirt outside of bermed/lined areas. Excavations have not yet been filled.

Date: 10/16/2014 ***Status:*** Correspondence ***Author:*** Martin, Russell

Updated Oil Volume:

Updated Salt Water Volume:

Updated Other Volume:

Updated Other Contaminant

Notes:

Phone call with report contact. Large pile of dirt is impacted material from eastern excavation. Fill dirt and clay is being brought in from Fairview, MT. The disposal location will be Dishon Disposal.

Date: 7/15/2015 ***Status:*** Inspection ***Author:*** Martin, Russell

Updated Oil Volume:

Updated Salt Water Volume:

Updated Other Volume:

Updated Other Contaminant

Notes:

7/15/2015 at 9:54 a.m., on location. Area revegetated with erosion control installed on slope of wellpad. No further impact visible. No further follow-up required at this time.